Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssptaeal1624

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
* * * * * * * * * * Welcome to STN International
                                                   * * * * * * * * * *
NEWS 1
                 Web Page for STN Seminar Schedule - N. America
NEWS 2 DEC 01 ChemPort single article sales feature unavailable
NEWS 3 APR 03 CAS coverage of exemplified prophetic substances
                 enhanced
NEWS 4 APR 07
                 STN is raising the limits on saved answers
NEWS 5 APR 24 CA/Caplus now has more comprehensive patent assignee
                 information
NEWS 6 APR 26 USPATFULL and USPAT2 enhanced with patent
                 assignment/reassignment information
NEWS 7 APR 28 CAS patent authority coverage expanded
NEWS 8 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 9 APR 28 Limits doubled for structure searching in CAS
                 REGISTRY
NEWS 10 MAY 08 STN Express, Version 8.4, now available
NEWS 11 MAY 11 STN on the Web enhanced
NEWS 12 MAY 11 BEILSTEIN substance information now available on
                 STN Easy
NEWS 13 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased
                 limits for exact sequence match searches and
                 introduction of free HIT display format
NEWS 14
         MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal
                 status data
         MAY 28 CAS databases on STN enhanced with NANO super role in
NEWS 15
                 records back to 1992
NEWS 16 JUN 01 CAS REGISTRY Source of Registration (SR) searching
                 enhanced on STN
```

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges

and other penalties.

FILE 'HOME' ENTERED AT 15:50:28 ON 22 JUN 2009

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.66 0.66

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:52:03 ON 22 JUN 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUN 2009 HIGHEST RN 1159253-26-5 DICTIONARY FILE UPDATES: 21 JUN 2009 HIGHEST RN 1159253-26-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10594105species.str

<12/04/2007>

chain nodes : 25 26 27 28 ring nodes : chain bonds : 6-25 10-28 14-27 17-20 25-28 27-28 ring bonds : $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18$ $14-15 \quad 15-16 \quad 16-17 \quad 17-18 \quad 19-20 \quad 19-24 \quad 20-21 \quad 21-22 \quad 22-23 \quad 23-24$ exact/norm bonds : 6-25 13-14 13-18 14-15 14-27 15-16 16-17 17-18 17-20 25-28 27-28exact bonds : 10 - 28normalized bonds : $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 19-20 \quad 19-24$ 20-21 21-22 22-23 23-24 isolated ring systems : containing 1 : 7 : 13 : 19 : Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:Atom L1 STRUCTURE UPLOADED => d 11L1 HAS NO ANSWERS L1STR * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * Structure attributes must be viewed using STN Express query preparation. => s 11 full THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 185.40 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y FULL SEARCH INITIATED 15:53:29 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 11045 TO ITERATE 100.0% PROCESSED 88 ANSWERS 11045 ITERATIONS SEARCH TIME: 00.00.01 L2 88 SEA SSS FUL L1 => file caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 187.50 186.84

FILE 'CAPLUS' ENTERED AT 15:53:50 ON 22 JUN 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Jun 2009 VOL 150 ISS 26 FILE LAST UPDATED: 21 Jun 2009 (20090621/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12 full L3 2 L2

=> d ibib abs hitstr tot
THE ESTIMATED COST FOR THIS REQUEST IS 11.28 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:v

<12/04/2007>

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1103625 CAPLUS

DOCUMENT NUMBER: 143:387060

TITLE: Preparation of piperazine or piperidine derivatives as

serotonin reuptake inhibitors

INVENTOR(S): Pinney, Kevin G.; Miranda, Maria Graciela; Dorsey,

James Michael

PATENT ASSIGNEE(S): Baylor University, USA SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.						DATE		APPLICATION NO.					DATE					
	2005094896 2005094896								WO 2005-US10356						20050328				
		CN, GE, LK, NO, SY, BW, AZ,	CO, GH, LR, NZ, TJ, GH, BY,	CR, GM, LS, OM, TM, GM, KG,	CU, HR, LT, PG, TN, KE, KZ,	CZ, HU, LU, PH, TR, LS, MD,	AU, DE, ID, LV, PL, TT, MW, RU, GR,	DK, IL, MA, PT, TZ, MZ, TJ,	DM, IN, MD, RO, UA, NA, TM,	DZ, IS, MG, RU, UG, SD, AT,	EC, JP, MK, SC, US, SL, BE,	EE, KE, MN, SD, UZ, SZ, BG,	EG, KG, MW, SE, VC, TZ, CH,	ES, KP, MX, SG, VN, UG, CY,	FI, KR, MZ, SK, YU, ZM, CZ,	GB, KZ, NA, SL, ZA, ZW, DE,	GD, LC, NI, SM, ZM, AM, DK,	ZW	
EP	1732	MR, 610	NE,	SN,	TD, A2	TG,	BF, AP, 2006	EA, 1220	EP,	OA EP 2	005-	7307	78	ŕ	2	0050	328		
		IS, HR,	IT, LV,	LI, MK,	LT, YU	LU,	CZ, MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,		
PRIORIT	RIORITY APPLN. INFO.:									US 2007-594105 US 2004-557069P WO 2005-US10356					P 20040326				
GI GI	* *						CASREACT 143:387060; MARPAT 143:387060												

AB Title compds. I [X = F or CF3; Y = (CH2)n; n = 0-1; A = N or C; Ar = aryl] and their pharmaceutically acceptable salts, are prepared and disclosed as serotonin reuptake inhibitors. Thus, e.g., II was prepared by reduction of 1-phenyl-3-(4-phenyl-piperazin-1-yl)-propan-1-ol (preparation given) using sodium borohydride followed by coupling with 4-fluorophenol. The ability of I to inhibit [3H]5-HT uptake was evaluated using liquid scintillation spectroscopy and it was revealed that selected compds. of the invention possessed IC50 values in the range of 1.45 up to 9.56 $\mu \rm M$. I as serotonin reuptake inhibitors should prove useful in the treatment of depression. Pharmaceutical composition comprising I are disclosed.

ΙI

Ι

IT 691872-56-7P 691872-58-9P 691872-60-3P 691872-62-5P 691872-64-7P 691872-66-9P 866548-21-2P 866548-22-3P 866548-24-5P 866548-25-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazine or piperidine derivs. as serotonin reuptake inhibitors)

RN 691872-56-7 CAPLUS

CN Piperazine, 1-(3-chlorophenyl)-4-[2-(4-fluorophenoxy)-2-phenylethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ & \text{CH}_2 - \text{CH} - \text{O} \end{array}$$

RN 691872-58-9 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-(2-methoxyphenyl)-(CA INDEX NAME)

RN 691872-60-3 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 691872-62-5 CAPLUS

CN Piperazine, 1-(3-chlorophenyl)-4-[2-(4-fluorophenoxy)-2-phenylethyl]-, hydrochloride (1:1) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ & \text{Ph} & \\ & \text{CH}_2-\text{CH}-\text{O} \end{array}$$

● HCl

RN 691872-64-7 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-(2-methoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 691872-66-9 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-[3-(trifluoromethyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 866548-21-2 CAPLUS

CN Piperazine, 1-[3-(4-fluorophenoxy)-3-phenylpropyl]-4-phenyl- (CA INDEX NAME)

RN 866548-22-3 CAPLUS

CN Piperazine, 1-[3-(4-fluorophenoxy)-3-phenylpropyl]-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 866548-24-5 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-phenyl- (CA INDEX NAME)

866548-25-6 CAPLUS Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME) CN

● HCl

```
ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
T.3
                         2004:170822 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         140:417233
TITLE:
                         Synthesis and biological evaluation of
                         2-(4-fluorophenoxy)-2-phenyl-ethyl piperazines as
                         serotonin-selective reuptake inhibitors with a
                         potentially improved adverse reaction profile
AUTHOR(S):
                         Dorsey, James M.; Miranda, Maria G.; Cozzi, Nicholas
                         V.; Pinney, Kevin G.
CORPORATE SOURCE:
                         Department of Chemistry and Biochemistry and The
                         Center for Drug Discovery, Baylor University, Waco,
                         TX, 76798-7348, USA
                         Bioorganic & Medicinal Chemistry (2004), 12(6),
SOURCE:
                         1483-1491
                         CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER:
                         Elsevier Ltd.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
OTHER SOURCE(S):
                         CASREACT 140:417233
     Three new 2-(4-fluorophenoxy)-2-phenyl-Et piperazines,
     1-(3-chlorophenyl)-4-[2-(4-fluorophenoxy)-2-phenylethyl]-piperazine,
     1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-(2-methoxyphenyl)-piperazine, and
     1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-(3-trifluoromethylphenyl)-
     piperazine, modeled after the potent antidepressant fluoxetine and coupled
     with several functionalized piperazines, have been prepared by chemical
     synthesis as selective serotonin reuptake inhibitors (SSRIs) with a
     potentially improved adverse reaction profile. Typical SSRIs, although
     very effective in the treatment of depression, still face the troublesome
     side effect of sexual dysfunction. A number of pharmacol. agents-notably,
     drugs in the piperazine class-have been used to reverse SSRI-induced
     sexual dysfunction, and evidence for developing an improved SSRI by
     coupling a fluoxetine congener with the pharmacophore of a reversal agent
     holds promise. Preliminary data indicates that the hydrochloride (HCl)
     salts of piperazines exhibit single-site binding at the site of the
     serotonin reuptake transporter (SERT). However, each of the three compds.
     are much less potent than typical SSRIs, showing micromolar (\mu M)
     affinity for the SERT with IC50 values of 1.45 \mu\text{M}, 3.27 \mu\text{M}, and 9.56
     \mu\text{M}, resp. Further biol. evaluation of piperazine compds. is needed
     before definitive conclusions can be made with regard to each compound's
     potential for use as an SSRI-type candidate which is devoid of sexual side
     effects. Nevertheless, the initial findings are quite encouraging, thus
     lending credence to the idea of hybridizing an SSRI congener with that of
     the pharmacophore of an agent known to reverse or treat SSRI-induced
     sexual dysfunction.
     691872-62-5P 691872-64-7P 691872-66-9P
ΤТ
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (synthesis and structure-activity relationship of
        2-(4-fluorophenoxy)-2-Ph-Et piperazines as serotonin-selective reuptake
        inhibitors with a potentially improved adverse reaction profile)
RN
     691872-62-5 CAPLUS
     Piperazine, 1-(3-\text{chlorophenyl})-4-[2-(4-\text{fluorophenoxy})-2-\text{phenylethyl}]-
```

<12/04/2007> Erich Leese

hydrochloride (1:1) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

● HCl

RN 691872-64-7 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-(2-methoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 691872-66-9 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-[3-(trifluoromethyl)phenyl]-, hydrochloride (1:1) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ & \text{Ph} & \\ & \text{CH}_2\text{-CH-O} & \\ \end{array}$$

● HCl

IT 691872-56-7P 691872-58-9P 691872-60-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and structure-activity relationship of

2-(4-fluorophenoxy)-2-Ph-Et piperazines as serotonin-selective reuptake inhibitors with a potentially improved adverse reaction profile)

RN 691872-56-7 CAPLUS

CN Piperazine, 1-(3-chlorophenyl)-4-[2-(4-fluorophenoxy)-2-phenylethyl]- (CA INDEX NAME)

RN 691872-58-9 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-(2-methoxyphenyl)-(CA INDEX NAME)

RN 691872-60-3 CAPLUS

CN Piperazine, 1-[2-(4-fluorophenoxy)-2-phenylethyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 15:50:28 ON 22 JUN 2009)

FILE 'REGISTRY' ENTERED AT 15:52:03 ON 22 JUN 2009

L1 STRUCTURE UPLOADED

L2 88 S L1 FULL

FILE 'CAPLUS' ENTERED AT 15:53:50 ON 22 JUN 2009

L3 2 S L2 FULL

=> log y

COST IN U.S. DOLLARS

SINCE FILE
ENTRY
SESSION
FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
TOTAL
TOTAL

CA SUBSCRIBER PRICE

ENTRY
SESSION

-1.64

-1.64

STN INTERNATIONAL LOGOFF AT 16:04:47 ON 22 JUN 2009